

What is claimed is:

1. A retardation film comprising:

a transparent support positioned in a plane; and

at least one optically anisotropic layer having a
5 first direction with a smallest refractive index,

wherein said at least one optically anisotropic
layer is formed of at least one compound exhibiting a
liquid crystal phase; said at least one optically
anisotropic layer exhibits biaxiality; and the first
10 direction is substantially orthogonal to a direction
normal to the plane of the transparent support.

2. The retardation film as claimed in claim 1,
wherein the liquid crystal phase is a biaxial liquid
15 crystal phase.

3. The retardation film as claimed in claim 2,
wherein the biaxial liquid crystal phase is a biaxial
nematic liquid crystal phase.

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4. The retardation film as claimed in claim 1,
wherein said at least one optically anisotropic layer has
a second direction with a largest refractive index, and
the second direction is substantially orthogonal to a
25 direction normal to the plane of the transparent support.

5. The retardation film as claimed in claim 1, wherein said at least one optically anisotropic layer has a support-side interface and an air interface; an angle defined by the first direction and the normal direction of the transparent support is from 75° to 105° at both of the support-side interface and the air interface; and an angle defined by the second direction and the normal direction of the transparent support is from 75° to 105° at both of the support-side interface and the air interface.

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6. The retardation film as claimed in claim 4; which further comprises an alignment film between the transparent layer and said at least one optically anisotropic layer.

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7. The retardation film as claimed in claim 2, wherein the compound exhibiting the biaxial liquid crystal phase is at least one of a polymerizable compound and a polymer compound.

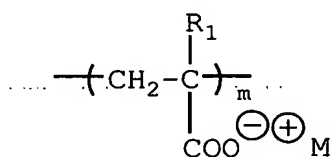
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8. The retardation film as claimed in claim 6, wherein the alignment film comprises a polymer having at least one of a hydrophobic group and an exclude-volume group.

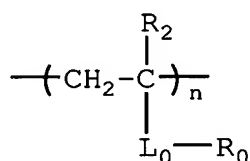
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9. The retardation film as claimed in claim 8,
 wherein the polymer comprises an acrylic or methacrylic
 acid copolymer comprising a repeating unit represented by
 the following formula (I) and a repeating unit represented
 5 by the following formula (II) or (III):

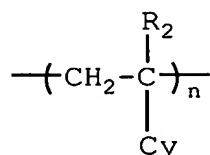
(I)



(II)



(III)



10 wherein R_1 represents a hydrogen atom or a methyl group; R_2
 represents a hydrogen atom, a halogen atom or an alkyl
 group having from 1 to 6 carbon atoms; M represents a
 proton, an alkali metal ion or an ammonium ion; L_0
 represents a divalent linking group selected from the
 15 group consisting of $-\text{O}-$, $-\text{CO}-$, $-\text{NH}-$, $-\text{SO}_2-$, an alkylene
 group, an alkenylene group, an arylene group and a
 combination thereof; R_0 represents a hydrocarbon group
 having from 10 to 100 carbon atoms or a fluorine atom-
 substituted hydrocarbon group having from 1 to 100 carbon

atoms; C_y represents an aliphatic ring group, an aromatic group or a heterocyclic group; m is from 10 to 99 mol%; and n is from 1 to 90 mol%.

5 10. The retardation film as claimed in claim 1, wherein said at least one optically anisotropic layer is not stretched.

10 11. An elliptically polarizing film comprising a retardation film claimed in claim 1 and a polarizing film.